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(54) Title: AGENTS FOR THE REGULATION OF GAMETOPHYTIC SELF-INCOMPATIBILITY AND A CONTROL METHOD FOR THE BREAKDOWN OF GAMETOPHYTIC SELF-INCOMPATIBILITY USING THE AGENTS

(57) Abstruct: This invention relates to the agents for regulating gametophytic self-incompatibility (SI), which inhibit a style-specific S RNase promoting gametophytic self-incompatibility. The invention includes the agricultural composition of the agent of zinc(II) complexes and/or copper(II) complexes for the breakdown of the gametophytic SI of nearly one-half of all the families of angiosperms, including the Rosaceae (apples, pears, cherries, almonds, plums, mango, etc), the Solanaceae (tomatoes, petunia, potatoes, tobacco, etc), the Scrophularaceae, and many grasses. The invention also includes a control method for regulating and suppressing gametophytic SI of a gametophytic self-incompatible plant with the agents, and a control method for the production of novel self-pollinated seeds that are produced by the regulation agents.